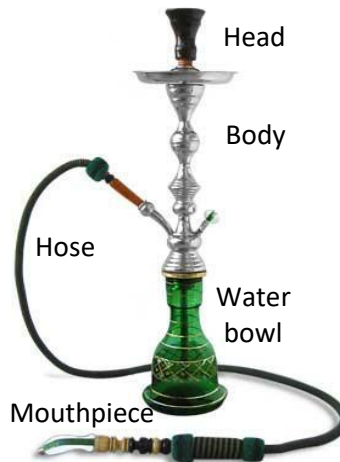


Hookah or Waterpipe

What is a hookah?

A hookah, also known as *shisha* or *narghile*, is a waterpipe that originated several hundred years ago in the Middle East and India.^{1,2} While hookahs may vary in size and shape, they typically consist of a head, body, water bowl, hose, and mouthpiece.^{1,2} Specially-made tobacco is placed beneath hot charcoal in the head, and smoke from the burning tobacco is drawn down through the body, water bowl, and hose and inhaled through the mouthpiece.^{1,2}



Hookah Tobacco and Smoking Behaviors

Hookah tobacco is often a combination of tobacco leaves and a sweetener such as honey or molasses.²

It is sold in a variety of flavors such as candy or fruit flavors.^{1,2} Typically, hookahs are smoked socially among a group of individuals who share a pipe and mouthpiece.^{1,2}

Health Effects of Hookah Use

Harmful Chemicals

- Hookah smoking is not a safe alternative to cigarettes and poses many of the same health risks as cigarettes.¹
- Hookah smoke contains nicotine, which is highly addictive.¹
- The charcoal used to heat hookah tobacco may produce high levels of carbon monoxide, metals, and cancer-causing chemicals.¹
- While non-tobacco or “herbal” products are available for hookah, studies have shown that smoke from these products also contains carbon monoxide and other harmful chemicals.^{1,3}

Increased Disease Risk

- Chemicals present in hookah smoke and the charcoal used to heat hookah tobacco may increase the risk of:
 - Lung, oral, and other cancers
 - Reduced lung function
 - Heart disease
 - Poor reproductive health outcomes.¹
- Sharing a hookah with others may transmit infectious diseases.¹

High Levels of Smoke Exposure

- Because hookahs are smoked over longer periods of time, hookah smokers may inhale far more smoke than someone smoking a single cigarette.^{1,2,4} Over prolonged sessions, hookah smokers may inhale the same amount of smoke as smoking 100 cigarettes or more.²
- After a 45 minute hookah session, hookah users have been shown to have exhaled carbon monoxide levels nearly nine times higher than after smoking a cigarette.⁴

Fast Facts

Hookah smoking poses many of the **same health risks as smoking cigarettes**, including:¹

- Lung cancer
- Reduced lung function
- Heart disease
- Poor reproductive outcomes

Over prolonged sessions, hookah smokers may inhale the same amount of smoke as smoking **100 cigarettes or more**.²

Hookah smoke contains nicotine, which is highly addictive.¹

Hookah smoking can cause **high levels of indoor air pollution**.^{10,11}

In 2018, **6.6%** of Hoosier high school students had ever tried smoking a hookah.⁸

Hookah or Waterpipe

Perceptions and Prevalence of Hookah Use

In recent years, hookah smoking has increased in popularity, especially among adolescents and young adults. This may be due to several factors, including the availability of sweetened or flavored hookah tobacco, the rise in hookah bars and cafés, perception of reduced harm, mass media, and the internet.⁵

In the United States:

- In 2016, an estimated 600,000 high school students nationwide (4.1%) were past-month hookah users.⁶
- Some studies among college students show rates of past-year hookah use between 22% and 40%.⁷

In Indiana:

- In 2018, 6.6% of high school students had ever tried a hookah, and 2.1% reported past-month hookah use.⁸
- In 2019, about 1.4% of young adults ages 18 to 24 reported past-30-day hookah use.⁹

Secondhand Smoke from Hookahs

Hookahs produce secondhand smoke from both the tobacco and charcoal or other heat source, which may pose health risks for nonsmokers.¹ Hookah bars are currently exempt from Indiana's smoke-free air law, although local municipalities may adopt stricter smoke-free air laws that include hookah bars.

Secondhand Hookah Smoke in Homes

- Hookah smoking may be a major source of secondhand smoke exposure and indoor air pollution in homes where hookahs are smoked.
- A 2016 study found that compared to rooms where no smoking or cigarette smoking occurred, rooms in which hookahs were smoked had the highest levels of indoor air pollutants.¹⁰
- Even in non-smoking rooms adjacent to where hookah smoking occurred, carbon monoxide levels were 2.5 to 4 times higher than in non-smoking homes or non-smoking rooms in homes where cigarettes were smoked.¹⁰

Secondhand Hookah Smoke in Workplaces

- Research has shown that hookah bars have elevated concentrations of indoor air pollution, including fine particulate matter, fine black carbon, and carbon monoxide.¹¹
- Hookah bar workers exposed to secondhand smoke at work have been shown to have significantly higher levels of inflammatory markers in their blood and significantly higher levels of exhaled carbon monoxide compared to pre-shift levels.¹¹

Tobacco Cessation

Quitting the use of all tobacco products, including hookah, is one of the best ways to improve health. The Indiana Tobacco Quitline (1-800-QUIT-NOW, www.QuitNowIndiana.com) provides free evidence-based advice, support, and resources for Hoosiers interested in quitting tobacco.

¹ Centers for Disease Control and Prevention. Hookahs. December 1, 2016. Accessed June 12, 2017 from https://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/index.htm.

² American Lung Association. An Emerging Deadly Trend: Waterpipe Tobacco Use. Washington: American Lung Association, 2007. Accessed June 12, 2017 from http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf.

³ Shihadeh A, Salman R, Jaroudi E, et al. Does switching to a tobacco-free waterpipe product reduce toxicant intake? A crossover study comparing CO, NO, PAH, volatile aldehydes, tar and nicotine yields. *Food Chem Toxicol*. 2012; 50(5): 1494-1498.

⁴ Eissenberg T, Shihadeh A. Waterpipe tobacco and cigarette smoking: direct comparison of toxicant exposure. *Am J Prev Med*. 2009; 37(6): 512-523.

⁵ Maziak W. The waterpipe: time for action. *Addiction*. 2008; 103(11):1763-1767.

⁶ Gentzke AS, Creamer M, Cullen KA, et al. Tobacco product use among middle and high school students – United States, 2011–2018. *MMWR*. 2019; 68: 157-164.

⁷ U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health, 2012

⁸ Indiana Youth Tobacco Survey, 2018.

⁹ Indiana Adult Tobacco Survey, 2019.

¹⁰ Weitzman M, Yusufali AH, Bali F, et al. Effects of hookah smoking on indoor air quality in homes. *Tobacco Control*. 2016; doi: 10.1136/tobaccocontrol-2016-053165.

¹¹ Zhou S, Behrooz L, Weitzman M, et al. Secondhand hookah smoke: an occupational hazard for hookah bar employees. *Tobacco Control*. 2016; 26(1):40-45. **02/28/2020**

